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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,948	12/06/2001	Reinhard Berger	GS 0466 A US	5713

7590 12/31/2003
Alfred J. Mangels
4729 Cornell Road
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EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,948

Applicant(s)

BERGER ET AL.

Examiner

Melody M. Burch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 26 November 2003.

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-13 and 15-17 is/are rejected.

7) ☒ Claim(s) 14 is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/29/03 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of the electric motor including a rotatable drive shaft that has a longitudinal axis that is substantially parallel to the longitudinal axis of the toothed rack as claimed in claim 15 and the limitation of a gear drive system operatively connected between the electric motor and the gear as claimed in claim 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Examiner notes that the rotatable drive shaft is not shown in the figures.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification fails to provide proper antecedent basis for the term "gear drive system" as claimed in line 2 of claim 17. Examiner has interpreted the gear drive system to be the drive shaft which is connected between the electric motor and the gear.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-9, 11-13, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5954178 to Fischer et al.

Re: claims 1, 11, and 16. Fischer et al. show in figure 13 a clutch actuator 1000 for actuating an automatic clutch as disclosed in col. 29 lines 29-33 or an automatic transmission, the actuator comprising: a housing 1004 that includes an axially extending first receptacle shown in the area of the lead line of number 1012, a toothed rack (or notched bar) 1010,1013 slidably received within the first receptacle for linear movement along a rack longitudinal axis as disclosed in col. 29 lines 14-16, a second receptacle shown in the area of element 1005 adjacent to the first receptacle and within which

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second receptacle a gear 1005 (spur gear as disclosed in col. 28 line 39) is rotatably carried, wherein a portion of the second receptacle intersects a portion of the first receptacle to define a space that is common to both the first receptacle and the second receptacle as shown in the area above and to the right of the lead line of number 1007, wherein the gear 1005 is in meshing engagement with the toothed rack via element 1006,1009 (gear 1005 is in meshing engagement with element 1006,1009 which is in meshing engagement with toothed rack 1010) for linearly moving the toothed rack within the first receptacle, and an electric motor 1001 drivingly connected with the gear 1005, wherein the electric motor and the gear are provided as a pre-assembled unit that is removably connected with the housing as disclosed in col. 28 lines 60-61 lines and in col. 28 lines 37-39, respectively.

Re: claim 3. Fischer et al. show in figure 13 the limitation wherein the actuator includes an energy accumulator 1012 positioned between and in contact with the toothed rack and the housing, and wherein the toothed rack is movable in a first direction of movement that is opposite to a force imposed on the toothed rack by the energy accumulator, and is movable in a second direction by the force of the energy accumulator.

Re: claims 4-6. Fischer et al. show in figure 13 the limitation wherein the energy accumulator 1012 contacts the toothed rack at a first protrusion shown in the area of the lead line of number 1013 extending outwardly from the toothed rack.

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Re: claims 7-9. Fischer et al. show in figure 13 the limitation wherein the energy accumulator contacts the housing at an inwardly extending second protrusion shown in the area below the lead line number 1012a within the housing.

Re: claims 12 and 13. Fischer et al. show in figure 13 the limitation wherein the toothed rack is supported in bearings (indirectly by bearing 1007 via element 1006 and directly by bearing 1011) carried adjacent end areas of the first receptacle.

Re: claim 15. Fischer et al. show in figure 13 the limitation wherein the electric motor includes a rotatable drive shaft 1002 that has a longitudinal axis that is substantially parallel to the longitudinal axis of the toothed rack.

Re: claim 17. Fischer et al. show in figure 13 the limitation wherein the actuator includes a gear drive system 1002 operatively connected between the electric motor and the gear for transmitting rotational movement between the motor and the gear.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al.

Fischer et al. describe the invention substantially as set forth above including the

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limitation wherein the toothed rack, particularly portion 1010 of the toothed rack is substantially cylindrical as shown in figure 13, but does not specifically show the limitation of the first receptacle being substantially a hollow cylinder.

Applicant fails to provide an explanation of criticality associated with the first receptacle being substantially a hollow cylinder. In *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration yielded unexpected results. In the absence of an explanation of criticality regarding the shape of the first receptacle, Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the hollow shape of the first receptacle of Fischer et al. shown in figure 13 to have been in the form of a cylinder in order to provide adequate space to shelter the toothed rack and other components from debris.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. in view of US Patent 5732810 to Schulz-Andres.

Fischer et al. describe the invention substantially as set forth above, but do not show or disclose the first protrusion being connected by one of an interlocking, a frictional locking, a force locking, or a material locking connection.

Schulz-Andres teaches in the last two lines of the abstract the use of a ring element and the outer diameter of a component being connected by way of a friction locking connection.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the connection of the first protrusion and the toothed rack to have been by way of friction locking, in view of the teachings of Schulz-Andres, in order to provide an old and well-known means of securely attaching one component to another.

Allowable Subject Matter

9. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed 11/26/03 have been fully considered but they are not persuasive. With regard to the drawing objection, Applicant argues that the description in paragraph [0019] of the specification coupled with the structure illustrated in figures 1 and 2 would clearly enable one skilled in the art to make and use the claimed invention. Examiner maintains that the drive shaft claimed in claim 15 is not shown. Examiner notes that a drive shaft is clearly shown, for example, in figure 13 of Fischer et al.

11. Applicant's arguments with respect to claims 1-13 and 15-17 have been considered but are moot -in view of the new ground(s) of rejection.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb
mmb

December 17, 2003

Melody M. Burch
12/17/03